```
JP 5-27/389
     1994:193300 CAPLUS
ΑN
DN
     120:193300
     Flexible epoxy resin compositions and their uses as sealing materials or
ΤI
     adhesives
IN
     Yonezawa, Akira; Kawai, Atsushi
     Tairu Mento Kk, Japan
PA
so
     Jpn. Kokai Tokkyo Koho, 14 pp.
     CODEN: JKXXAF
DT
     Patent
     Japanese
J.A
     ICM C08G059-40
IC
     ICS C08G059-50; C08L063-00; C08L083-06; C09J163-00; C09K003-10
     37-6 (Plastics Manufacture and Processing)
     Section cross-reference(s): 38, 42
FAN.CNT 1
                                           APPLICATION NO.
    PATENT NO.
                     KIND DATE
                      A2 19931019
                                           JP 1992-98864
                                                            19920325
     JP 05271389
    Storage-stable title compns. comprise epoxy resins, modified silicone
     resins, catalysts for the silicone resins, dehydration agents, and di-
     and/or triketimines from polyoxyalkylenediamine and
     polyoxyalkylenetriamines. A compn. contg. EP-4100 100,
    poly(methyldimethoxysilyl ether) (MSP20A) 50, Bu2Sn oxide in DOP 0.5,
     vinyltrimethoxysilane (KBM 1003) 0.5, CaCO3 207, TiO2 23, ketimine of
    polyoxypropylenetriamine and MIBK 80 parts was stable under N at
     50.degree. for 7 days, and gave cured test pieces with elongation 200%
and
     tensile strength 50 kgf/cm2.
     flexible epoxy resin sealant adhesive; ketimine polyoxyalkylenediamine
ST
     flexible epoxy resin; silicone resin flexible epoxy resin
IΤ
     Adhesives
     Sealing compositions
        (epoxy resin compns., contg. ketimines of polyoxypropylenediamine and
        triamine, flexible and storage-stable)
TT
     Siloxanes and Silicones, uses
     RL: USES (Uses)
        (di-Me, ethoxy-terminated, epoxy resins, flexible and storage-stable,
        for adhesive and sealant)
     11121-15-6, EP 4000
                           25085-99-8, EP 4100
ΙT
     RL: USES (Uses)
        (compns., contg. ketimines of polyoxypropylenediamine and triamine,
        flexible and storage-stable, for adhesive and sealant)
     108-10-1D, MIBK, ketimines with polyoxypropylenetriamine
                                                                2768-02-7,
     Vinyltrimethoxysilane 9003-11-6D, Ethylene oxide-propylene oxide
     copolymer, diamine derivs., ketimine with MIBK 25322-69-4D,
     Polyoxypropylene, triamine derivs., ketimine with MIBK
                                                             120041-50-1
     RL: USES (Uses)
        (epoxy resin compns. contg., flexible and storage-stable, for adhesive
        and sealant)
IT
     77396-40-8
```

(epoxy resins, flexible and storage-stable, for adhesive and sealant)

RL: USES (Uses)

WEST

End of Result Set

Generate Collection

L4: Entry 1 of 1

File: DWPI

Oct 19, 1993

DERWENT-ACC-NO: 1993-365304

DERWENT-WEEK: 199346

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TITLE: One-pack flexible epoxy! resin compsn. for sealing cpds. and adhesives - contains epoxy! resin, ketimine, modified silicone resin and its catalyst and a dehydrant, is storage stable, easily cured and has good flexibility

PATENT-ASSIGNEE:

ASSIGNEE TAIRU MENTO KK CODE

TAIRN

PRIORITY-DATA:

1992JP-0098864

March 25, 1992

PATENT-FAMILY:

PUB-NO JP 05271389 A PUB-DATE

LANGUAGE N/A PAGES

014

C08G059/40

MAIN-IPC

APPLICATION-DATA:

PUB-NO

APPL-DESCRIPTOR

October 19, 1993

APPL-NO

APPL-NO

JP05271389A

March 25, 1992

1992JP-0098864

N/A

INT-CL (IPC): C08G 59/40; C08G 59/50; C08L 63/00; C08L 83/06; C09J 163/00; C09K
3/10

ABSTRACTED-PUB-NO: JP05271389A

BASIC-ABSTRACT:

Compsn. contains (a) an epoxy resin; (b) a ketimine; (c) a modified silicone resin; (d) a catalyst for the modified silicone resin and (e) a dehydrant. The ketimine is a cpd. of formula (I), where A is residue of 9 or higher C polyoxyalkylenediamine, and R1-4 are H, 1-6C alkyl or phenyl.

The wt. ratio of modified silicone resin to epoxy resin is pref. 100:1-1000.

USE/ADVANTAGE - The compsn. have storage stability and cure at ordinary temp. to give cured compsns. with good flexibility. The epoxy resin compsns. are useful for sealing cpds. and as adhesives for concrete, glass, wood and metals. The ketimine used as a curative, does not react with epoxy resin in absence of water and the storage stability and flexibility of the cured compsn. are improved.

In an example, a mixt. of 100 pts.wt. 'EP-4100' (RTM), an epi-bis epoxy resin, 50 pts.wt. poly(methyldimethoxysilyl ether), 207 pts.wt. CaCO3 and 23 pts.wt. titanium oxide was stirred under 20 Torr 80 pts.wt. of a ketimine obtd. by dehydration of polyoxypropylenediamine with a mol.wt. of 400 and methyl isobutyl ketone. 0.5 pts.wt. vinyltrimeth oxysilane (dehydrant) and 0.5 pts.wt. dibutyltin oxide dioctyl phthalate soln. (catalyst) were added to the mixt. and the new mixt. was stirred under reduced pressure to give an epoxy resin compsn. with a tensile, strength of 50 kgf/cm2, an elongation of 200% and an adhesion strength or mortar break.

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11121-15-6 REGISTRY
RN
     Poly[oxy(methyl-1,2-ethanediyl)],
.alpha.,.alpha.'-[(1-methylethylidene)di-
     4,1-phenylene]bis[.omega.-(oxiranylmethoxy)-, homopolymer (9CI) (CA
INDEX
     NAME)
OTHER NAMES:
CN
     Adeka EP 4000
CN
     Adeka Resin EP 4000
CN
     ADK 4000
     EP 4000
CN
     Epiclon 717
CN
CN
     Gurishieru BPP 350
CN
     Rikaresin BPO 20E
     54667-37-7, 60267-15-4, 63278-42-2, 39354-76-2
MF
     ((C3 H6 O)n (C3 H6 O)n C21 H24 O4)x
     PMS, COM
CI
PCT
    Epoxy resin, Polyether
     STN Files: CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, USPATFULL
     CM
          55236-42-5
     CRN
         (C3 H6 O)n (C3 H6 O)n C21 H24 O4
     CCI IDS, PMS
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PAGE 1-A

$$CH_2-O$$
 $(C_3H_6)-O$ n Me Me

PAGE 1-B

$$- (c_3H_6) - \int_{n}^{\infty} o - cH_2 - \int_{0}^{\infty}$$

- 93 REFERENCES IN FILE CA (1967 TO DATE)
- 23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 93 REFERENCES IN FILE CAPLUS (1967 TO DATE)